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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,381	02/14/2006	Walter Niederstaetter	03071K	1036

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PROPAT, L.L.C.
425-C SOUTH SHARON AMITY ROAD
CHARLOTTE, NC 28211-2841

EXAMINER	
WOOD, ELLEN S	
ART UNIT	PAPER NUMBER
1794	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/568,381	NIEDERSTAETTER ET AL.	
	Examiner	Art Unit	
	ELLEN S. WOOD	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 June 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-10,12-19 and 21-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-10,12-19 and 21-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *06/10/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4, 6-10, 12-19, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heide et al. (US 2003/0165645, hereinafter "Heide") in view of Merritt et al. (US 1,001,635, hereinafter "Merritt") in view of Cruz (US 2004/0062834).

Heide discloses a single or multilayer packaging casing in the form a shirred stick based on synthetic polymers (abstract). The strength of the casing must not decrease during scalding to the extent that the casing burst or tears [0018]. During cooling the casing must shrink with the contents, without detaching or even forming wrinkles [0018]. The term synthetic polymers means polymer blends based on polyamides [0019]. The casing before shirring is stretched to give the casing significantly greater strength [0041]. The casing can by multilayerd [0042]. The casing can be printed, shirred in sections to form shirred sticks or be cut up into smaller pieces tied off at one end [0044]. The shirred sticks are used in production of sausages are by machine instead of manual sausage production [0044]. The wall thickness is between 20 to 55 μm [0047] and compressed in a ratio of 200:1 to 500:1 [0049]. The nominal caliber of ranges from 20 to 200 mm [0049]. Packing casings can be pushed onto a sausage meat emulsion

stuffing horn in a buckling-resistant and ready to stuff manner [0048]. A spray solution of an oil/water emulsion can be applied to the outer surface of the casing [0049].

Heide is silent with the water vapor permeability and the bending properties.

Merritt discloses a casing that is made from plastics or polyamides (col. 6 lines 55-57). The shirred stick casings are self-sustaining and adapted for stuffing with products, particularly emulsions that form sausages (col. 6 lines 11-13). The casings are made from plastics or polyamides (col. 6 lines 55-57), which are considered soft polymers. A typical additive to a casing is a plasticizer (col. 6 lines 62-65). The casings are stuffed to form individual links (col. 11 lines 7-9), thus it would be known to one of ordinary skill in the art that the casings were closed at one end. The tubular casings are typically gathered into compressed shirred ("pleated") sticks using well-known processes and equipment (cols. 6-7 lines 65-67 and line 1). During the shirring operation it is common to coat the casing, particularly the inner surface, with a solution that contains ingredients such as anti-pleat lock agents to form shirred stick casings with self-sustaining properties (col. 7 lines 1-13). The examiner considers this a temporary setting of the shirring geometry and the resultant breakdown in tension of the shirred pleats. The method of forming a shirred sausage casing and filling the casing with meat on a high speed fully automatic (FAM) mechanical stuffer (col. 11 lines 7-9). The individual casings stuffed with meat were produced (col. 11 line 9). In general the polyamide used for the casing is nylon (col. 1 lines 62-63), which is an aliphatic polyamide. The plasticizer can include propylene glycol (col. 8 lines 6-9).

Merritt is silent with the specific properties that are associated with the self-sustaining shirred stick casing such as the bending percentage and the extension of the shirred food casing after shirring.

Merritt discloses that the tubular casings are typically gathered into compressed self-sustaining shirred sticks (col. 6 lines 65-67). The compression ratio of the instant applicant is used to increase the intrinsic stability of the shirred food casing (pg. 4 lines 24-28). Thus, it would be obvious to one of ordinary skill at the time of the invention that the compression ratio of the instant applicant would be used to form the shirred sticks of Merritt to increase the stability of the self-sustaining shirred sticks.

Merritt discloses that when shirred casing stick are used with automatic food stuffing equipment it is extremely important that shirred casing stick has the durability to be a self-sustaining article (col. 8 lines 58-61). Thus, it would be obvious to one of ordinary skill in the art at the time of the invention that if the shirred casing stick is self-sustaining the amount of bending under the effect of the casings own weight would be minimal to none.

Merritt discloses that the formation of the shirred casing sticks will have sufficient coherency to hold together from immediately after shirring to storage (cols. 8-9 lines 67 and 1-7). Thus, it would be obvious to one of ordinary sill in the art at the time of the invention that if the shirred casing stick maintains its shape after shirring the amount of extension in the longitudinal direction would be minimal to none when stored.

Cruz discloses a polyamide-based sausage casing suitable for use with uncooked meats (abstract). The shirred stick casing is a polyamide based film [0020].

The shirred stick casing that is produce is sufficiently rigid for transportation to sausage manufacturers and provides sufficient resistance to premature unshirring and breakage during the filling process [0035]. The examiner considers the shirred stick casing of Cruz to have sufficient intrinsic stability to be processed on a stuffing machine. The polyamide resin blend can be biaxially stretch-oriented to produce a single-layered polyamide-based sausage casing (abstract). The thickness of that the shirred stick has a film thickness that ranges from 6 microns to about 80 microns [0031], thus the thickness is less than 90 μm (1 micron equals 1 μm). The shirred stick casing is a polyamide based film [0020], which is considered a soft synthetic polymer. The shirred stick casing has excellent gas and moisture permeability properties (abstract). The shirred stick casing is produced from an aliphatic polyamide or copolyamide based resin [0022].

Cruz is silent with regards to the specific properties of the water vapor permeability and corona treating the outside surface.

Cruz discloses that the polyamide resin is blended a silicon-based barrier control agent for the specific purpose to increase the permeability of the sausage casing (abstract). Thus, it would be obvious to one of ordinary skill in the art at the time of the invention that the water vapor permeability of the sausage casing disclosed by Cruz could be adjusted as required for particular applications because the Cruz teaches how to adjust the gas and moisture barrier properties of the casings. (abstract).

Cruz discloses that the single-layered polyamide based sausage casings can have the printing of words, numbers, and graphics [0037]. Corona treating increases the

surface energy of plastic films to improve wet ability and adhesion of inks. Thus, it would be obvious to one of ordinary skill in the art at the time of the invention to corona treat the outer surface of the shirred food casing to improve the adhesion of inks when printing words, number, and graphics onto the casings.

It would be obvious to one of ordinary skill in the art to combine the stability of the casing of Merritt with the water vapor permeability properties of Cruz with the formation of the shirred casings of Heide, because the combination of Cruz and Merritt form a shirred casing that is formed from a polyamide mixture that would improve the strength of the casing during stuffing of the sausage emulsion while maintaining the water vapor permeability properties and can be formed with the proper dimensions as seen in Merritt to form a casing that does not need the use of an separate support on an automatic stuffing machine.

Response to Arguments

3. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

The Cruz and Merritt reference have been used in different terms than the previous rejection. The references are used to show how a shirred casing can be varied while maintaining the base polymeric composition.

The 112 rejections have been withdrawn due to amendments made by the applicant.

Claims 5, 11, and 20 have been canceled.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELLEN S. WOOD whose telephone number is (571)270-3450. The examiner can normally be reached on Monday-Friday 7-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ellen S Wood
Examiner
Art Unit 1794

/Carol Chaney/
Supervisory Patent Examiner, Art Unit 1794